21. (amended) The method of claim 20, [using] which further includes the step of forming a tropelastin biocompatible inner lining in heart valves, heart implants, dialysis equipment, or oxygenator tubing for heart-lung by-pass systems.

23. (amended) A method for using a tropoelastin biomaterial as a tissue-fusible layer, comprising:

providing a layer of tropoelastin biomaterial having a first and second outer major surface [which is useable as a tissue-fusible material];

providing a tissue substrate having a first and second outer major surface; and

using said tropoelastin biomaterial as a heat fusible material by applying an energy absorbing material, which is energy absorptive within a predetermined range of light wavelengths, to one of said first and second outer surfaces of the tropoelastin biomaterial in an amount which will make said tropoelastin biomaterial tissue-fusible, and which will cause fusing together of one of said first and second outer surfaces of the tropoelastin biomaterial and one of said first and second outer surfaces of said tissue substrate, said energy absorbing material being applied so that it will penetrate into the interstices of said tropoelastin biomaterial,

irradiating the energy absorbing material with light energy in said predetermined wavelength range with an intensity being sufficient to fuse together one of said first and second outer surfaces of the tropoelastin biomaterial and the tissue substrate.

48. (amended) The method of claim 47, [which further includes the step of using tropoelastin material for replacement or repair of] wherein the tissue substrate is selected from a group consisting of bladders, intestines, tubes, esophagus, ureters, arteries, veins, stomachs, lungs, hearts, colons, skin, [or as a cosmetic implantation].

49. (amended) The method of claim 47, which further includes the step of forming [an] a tropoelastin into a three-dimensional support structure wherein said tropoelastin material is

combined with a stromal support matrix populated with actively growing stromal cells.

(amended) The method of claim [1] 16, wherein [a] the stromal support matrix comprises fibroblasts.

50. (amended) The method of claim [47] 49, wherein [a] the stromal support matrix [comprise] comprises fibroblasts.

51. (amended) The method of claim 47, which further includes the step of forming a cellular lining of human cells on one of the major surfaces of [a] said biocompatible tropoelastin biomaterial [layer].

52. (amended) The method of claim [47] 51, wherein [a] said human cells [which are employed to form such a lining are at least one] are selected from a group consisting of endothelial cells, epithelial cells and urothelial cells.

54. (amended) The method of claim 47, [using] which further includes the step of forming a tropelastin biocompatible inner lining in heart valves, heart implants, dialysis equipment, or oxygenator tubing for heart-lung by-pass systems.

90. (amended) The method of claim 76, [which further includes the step of using tropoelastin material for replacement or repair of] wherein the tissue substrate is selected from a group consisting of bladders, intestines, tubes, esophagus, ureters, arteries, veins, stomachs, lungs, hearts, colons, skin, [or as a cosmetic implantation].

91. (amended) The method of claim 76, which further includes the step of forming an tropoelastin into a three-dimensional support structure wherein said tropoelastin material is combined with a stromal support matrix populated with actively growing stromal cells.

92. (amended) The method of claim 76, wherein a stromal support matrix [comprise] comprises fibroblasts.

94. (amended) The method of claim [76] 93, wherein said human cells [which are employed to form such a lining are at least one] are selected from a group consisting of endothelial cells, epithelial cells and urothelial cells.

96. (amended) The method of claim 20, [using] which further includes the step of forming a tropoelastin biocompatible inner lining in heart valves, heart implants, dialysis equipment, or oxygenator tubing for heart-lung by-pass systems.

98. (amended) A method for using a tropoelastin biomaterial as a tissue-fusible layer, comprising:

providing a layer consisting essentially of tropoelastin biomaterial having a first and second outer major surface which is useable as a tissue-fusible material;

providing a tissue substrate having a first and second outer major surface; and

applying an energy absorbing material, which is energy absorptive within a predetermined range of light wavelengths, to one of said first and second outer surfaces of the tropoelastin biomaterial in an amount which will make said tropoelastin biomaterial tissue-fusible, and which will cause fusing together of one of said first and second outer surfaces of the tropoelastin biomaterial and one of said first and second outer surfaces of said tissue substrate, said energy absorbing material being applied so that it will penetrate into the interstices of said tropoelastin biomaterial;

irradiating the energy absorbing material with light energy in said predetermined wavelength range with an intensity being sufficient to fuse together one of said first and second outer surfaces of the tropoelastin biomaterial and the tissue substrate.

99. (amended) A method for producing an tropoelastin biomaterial fused onto a tissue substrate comprising:

providing a layer consisting essentially of tropoelastin biomaterial having a first and second outer major surface and a tissue substrate having a first and second outer major surface;

applying an energy absorbing material, which is energy absorptive within a predetermined range of light wavelengths, to one of said first and second outer surfaces of the tropoelastin biomaterial in an amount which will cause fusing together of one of said first and second outer surfaces of the tropoelastin biomaterial and one of said outer surface of said tissue substrate, said energy absorbing material penetrating into the interstices of said tropoelastin biomaterial;

indirectly irradiating the energy absorbing material by directing the light energy first through the tropoelastin biomaterial or tissue substrate and then to the energy absorbing material, said light energy being in said predetermined wavelength range with an intensity sufficient to fuse together one of said first and second outer surfaces of the crosslinked tropoelastin biomaterial and the outer surface of said tissue substrate; and

fusing together one of said first and second outer surfaces of the crosslinked tropoelastin biomaterial and the outer surface of said tissue substrate and substantially dissipating said energy absorbing material when said crosslinked tropoelastin biomaterial and said tissue substrate are fused together.

REMARKS

Attorney for Applicants has requested a personal interview with the Examiner on January 14, 1999 (anytime) or January 15, 1999 (AM preferred). This Preliminary Amendment will serve to narrow and focus the issues to be discussed at that personal interview.

The Examiner has indicated that the Declaration is defective, and that a new Declaration in compliance with 37 CFR 1.67(a) is required. Applicants will provide such an Declaration to